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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,439	12/05/2003	Scott A. Burton	59405US002	9418
32692 7590 08/24/2009 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
EXAMINER NERANGIS, VICKIE MARIE				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
08/24/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com

LegalDocketing@mmm.com

### Office Action Summary

**Application No.**

10/728,439

**Applicant(s)**

BURTON ET AL.

**Examiner**

VICKEY NERANGIS

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 94-117 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 94-117 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-US)  
Paper No(s)/Mail Date 5/26/09, 8/7/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/26/2009 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. All outstanding objections and rejections, except for those maintained below, are withdrawn in light of applicant's amendment filed on 5/26/2009.

***Claim Rejections - 35 USC § 112***

4. Claims 94 and 96-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claim 94, a continuous hydrophobic phase comprising a mixture of a "hydrophobic liquid phase" and a hydrophobic thermoplastic elastomeric polymer fails to satisfy the written description requirement of 35 USC 112, first paragraph since there does not appear to be a written description requirement of this mixture in the application as originally filed, *In re*

*Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. While there is support for mineral oil being mixed with hydrophobic thermoplastic elastomeric polymer.

With respect to claims 96-111, they are rejected for being dependent on a rejected claim.

***Claim Rejections - 35 USC § 103***

5. Claims 94, 95 and 101-117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cilento (EP 0 512 855) in view of Asmus (US 5,270,358) and Capelli (US 5,744,151).

Cilento discloses an absorbent wound composition comprising a polymeric matrix comprising styrene radial or block type copolymers (i.e., hydrophobic thermoplastic elastomeric polymer) such as styrene-isoprene-styrene (page 3, lines 3-16) and mineral oil and 25-75 wt % absorbing powders comprising absorbent polyacrylates which include salts of crosslinked polyacrylic acid and sodium polyacrylate (page 3, lines 37-43) and other secondary absorbent powders such as sodium calcium alginates and crosslinked sodium carboxymethylcellulose and water soluble hydrocolloids which behave as swelling agents (page 10, lines 32-42). The absorbent powders are superabsorbent because the composition can absorb 500-1000% liquid of their original weight (page 10, lines 15-17). Cilento also discloses the use antimicrobial agents (page 3, line 48).

Cilento fails to disclose (i) that the antimicrobial agent is silver oxide and dispersed in the absorbent powders and (ii) that the absorbent polyacrylate powders include a mixture a copolymer of sodium acrylate and acrylic acid.

With respect to (i), Asmus discloses a composite comprising a hydrocolloid (i.e., water-swellaable hydrophilic polymer) for use with wound care articles and teaches that antimicrobial

agents such as silver oxide are incorporated into the composition to reduce bacteria level and to minimize infection risk (col. 12, lines 16-49). Asmus teaches that the antimicrobial agents are included in the gel components and is therefore contained within the hydrophilic polymer (col. 12, lines 21-36). Further evidence supporting the desirability of antimicrobial agents such as silver oxide in absorbent powders is found in Capelli which discloses pharmaceutical compositions and teaches that it is useful to have an antimicrobial agent present in a hydrocolloid (i.e., absorbent powders of Cilento) because the hydrocolloids after absorbing wound exudate become an excellent microenvironment for the proliferation and overgrowth of microbes, wherein the microbes can shed from the hydrocolloid and back into the wound leading to infection. The presence of the antimicrobial agent in the hydrocolloid helps prevent infection and decrease odor (col. 19, line 56 to col. 20, line 9).

Given that the composition of Cilento teaches the use of antimicrobial agents in wound care articles and further given that antimicrobial agents such as silver oxide as taught by Asmus are advantageously used in absorbent powders (i.e., hydrocolloids) to prevent infection in articles for wound care as taught by Asmus and Capelli, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize a silver oxide in the composition of Cilento within the absorbent powders to minimize infection.

With respect to (ii), Cilento teaches the optional use of pharmacologically active agent such as zinc oxide skin protective agent.

Capelli discloses pharmaceutical compositions and teaches that it is useful to have an antimicrobial agent present in a hydrocolloid (i.e., absorbing powders of Cilento) because the hydrocolloids after absorbing wound exudate become an excellent microenvironment for the

proliferation and overgrowth of microbes, wherein the microbes can shed from the hydrocolloid and back into the wound leading to infection. The presence of the antimicrobial agent in the hydrocolloid helps prevent infection and decrease odor (col. 19, line 56 to col. 20, line 9).

Given that Cilento teaches the use of pharmacologically active agents such as zinc oxide and further given that pharmacologically active

With respect to (ii), Cilento teaches the use of absorbent polyacrylates which include salts of crosslinked polyacrylic acid and sodium polyacrylate.

Given that Cilento teaches the use of homopolymers salts of crosslinked polyacrylic acid and sodium polyacrylate, it would have been obvious to one of ordinary skill in the art to utilize a copolymer of prepared from monomers of the two homopolymers to obtain a copolymer that is capable of behaving as an absorbent and therefore be suitable in the composition of Cilento. It is well settled that it is prima facie obvious to combine two ingredients, each of which is targeted by the prior art to be useful for the same purpose. *In re Lindner* 457 F.2d 506,509, 173 USPQ 356, 359 (CCPA 1972). Further evidence to support the examiner's position is found in applicant's own specification which defines sodium polyacrylate as a copolymer of sodium acrylate and acrylic acid (page 9, lines 13-14).

6. Claims 96-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cilento (EP 0 512 855) in view of Takemori et al (US 5,075,373).

The discussion with respect to Cilento in paragraph 5 above is incorporated here by reference.

While Cilento discloses dispersed absorbing powders, it fails to teach the particle size of the particles in absorbing powder.

Takemori et al discloses a water-absorbent material like Cilento and teaches that the particle size of the water-absorbent hydrophilic resin is fine, particularly less than 40 microns in order for the hydrophilic resin to be readily dispersed in a hydrophobic material and to prevent the hydrophilic resin from being removed from the hydrophobic material (col. 5, lines 10-20).

Given the desirability of using a water-absorbent material having a particle size less than 40 microns as taught by Takemori et al, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize a hydrophilic polymer having a particle size 10 microns and less like presently claimed in order to improve dispersing and retaining properties.

#### ***Response to Arguments***

7. Applicant's arguments filed 5/26/2009 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that Asmus does not teach bioactive agents dispersed in hydrophilic microparticles dispersed in a nonadherent hydrophobic liquid and (B) that Asmus does not teach how the bioactive agents are dispersed in hydrophilic microparticles.

With respect to argument (A), while Asmus does not disclose all the features of the present claimed invention, it is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, and in combination with the primary reference, discloses the presently claimed invention.

With respect to argument (B), the instant claims are composition claims do not limit how the bioactive agents (i.e., metal oxides) come to be dispersed in the hydrophilic microparticles. Therefore, this deficiency of Asmus does not overcome the rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Nerangis whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/20/2009

/Vickey Nerangis/  
Primary Examiner, Art Unit 1796